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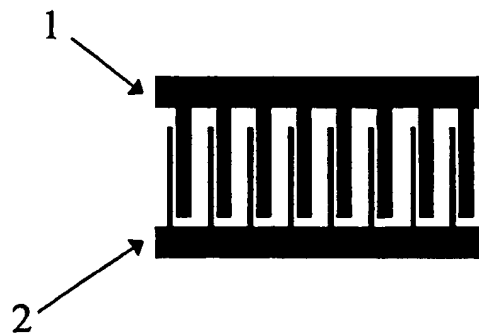
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controlled.

(57) Abstract: An apparatus for driving small volumes of fluid. The apparatus comprises a substrate and a first array of electrically conductive electrodes formed on the substrate. A second array of electrically conductive electrodes formed on the substrate, the first and second array being interlaced and being arranged such that each of the electrodes in the second array has a width in a fluid driving direction which is greater than that of each of the electrodes in the first array and such that the first and second set electrodes are positioned so that each of the electrodes of the first set is not at a position equidistant from adjacent electrodes of the second set, wherein both of the arrays of the arrays of electrodes having widths in the fluid flow direction and thickness selected such that, in use, by varying the peak value of an alternating drive voltage applied thereto the direction of flow of a fluid adjacent to the arrays of electrodes can be

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